## PATENT ABSTRACTS OF JAPAN

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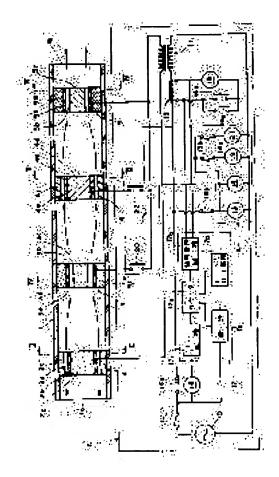
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## (54) APPARATUS FOR TREATING EXHAUST GAS

## (57)Abstract:

PURPOSE: To obtain an exhaust gas treating apparatus which does not decrease the treating capacity even if scaled up, by providing an insulative oxidation catalyst in the cylinder of the exhaust gas treating apparatus by an electric discharge.

CONSTITUTION: In a cylinder 1, first electrodes 2, 4 having clockwise spiral gas passages 2b, 4b formed to the outer peripheral parts of cylindrical conductors 2a, 4a thereof, second electrodes 3, 5 having counterclockwise spiral gas passages 3b, 5b formed to the inner peripheral parts of conductors 3a, 5a and insulative oxidation catalysts 2cW5c, 2dW5d are provided. When an exhaust gas is introduced from an introducing port 1a, the exhaust gas is swirled through the spiral passages 2bW5b and exhausted from an exhaust port 1b. When the switch 12 in a circuit C is closed to operate relays 13, 14 and solenoids 19, 21 and to open and close break and make switches 20, 22,



electric discharge due to high voltage application is generated between electrodes 2W3 and

subsequently between electrodes 4W5 for a short time and harmful and malodorous components in the exhaust gas are ionized. In addition, the exhaust gas is perfectly treated by oxidation action of the catalysts 2cW5c, 2dW5d to be discharged.